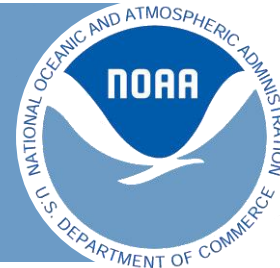


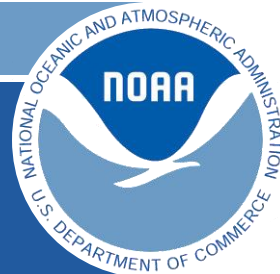


UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION



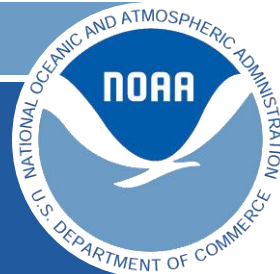
NOAA Regional Climate Services Western Region

L. DeWayne Cecil, Ph.D.
NWS Hydrometeorology Symposium
September 27, 2011



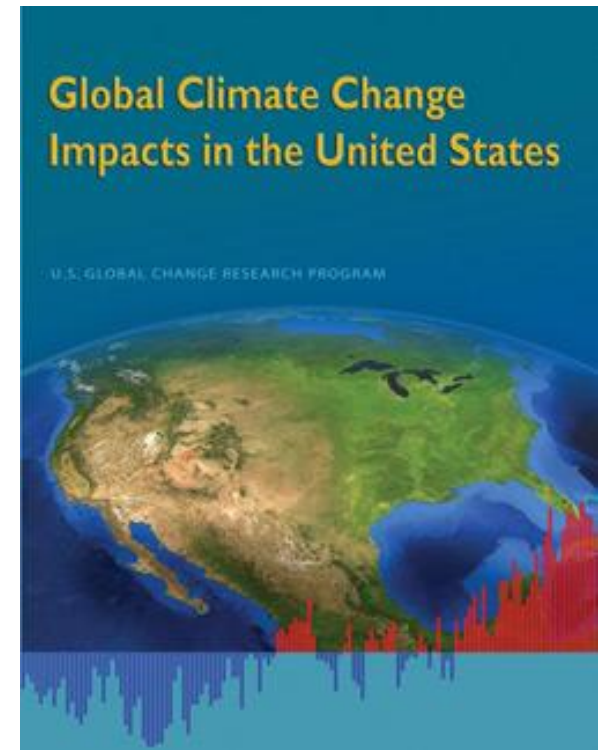
Overview

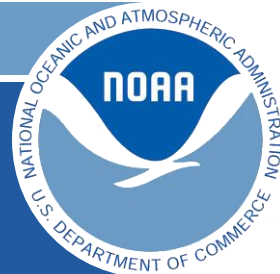
- NOAA climate services
 - Complimentary initiatives underway
 - 5 Initial climate services priorities
 - Climate services informal structure and accomplishments to date
- Western Region climate services
 - A regional climate services enterprise
 - **Scale, scale, scale!!!**
 - Western region climate services priorities



National Climate Initiatives Already Underway

- Interagency Task Force
 - White House OSTP and CEQ, NOAA, others
- US Global Change Research Program
 - 2009 (and 2013) National Assessments
- National Academy of Public Administration (NAPA) Study
 - Endorsed NOAA's climate service vision





5 Initial Priorities

(1) CLIMATE IMPACTS ON WATER RESOURCES: Provide coordinated and authorization information to guide water resources managers

Example User Groups: water resource managers, civil engineers, farmers, emergency management officials, USBR, USDA, USACE, Western Governors' Association



(2) COASTS AND CLIMATE RESILIENCE: Understand physical processes that drive sea-level rise and coastal inundation, and provide the best available information to decision-makers

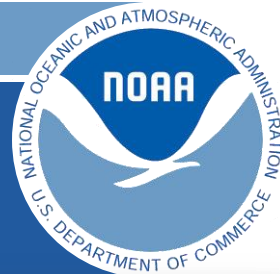
Example User Groups: coastal and emergency managers, NOS, FEMA, USACE, USGS, HUD, MSP



(3) SUSTAINABILITY OF MARINE ECOSYSTEMS: Improve understanding of, and information about, the impacts of climate on ocean properties critical to managing large marine ecosystems

Example User Groups: NMFS, states, NOS, FWS, USBR, fisheries management councils





5 Initial Priorities-cont.

(4) EXTREMES IN A CHANGING CLIMATE: Develop and deliver information to anticipate, prepare for, and adapt to weather and climate extremes

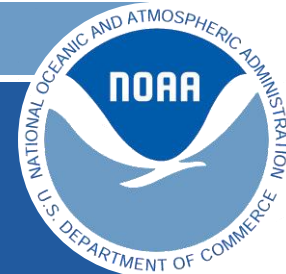
Example User Groups: emergency managers, state and local officials, energy industry, resource managers, city planners, insurance industry

Most important 3 factors, scale, scale, scale,,,adaptation to climate variability and change is local

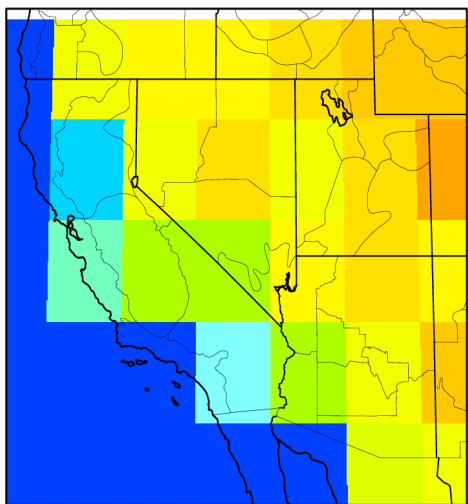
(5) INFORMING CLIMATE POLICY OPTIONS: Provide sound science to information climate-related policies, plans, and strategies including both mitigation and adaptation

Example User Groups: policy makers, energy industry, EPA, DOE, state and local communities, State Dept.

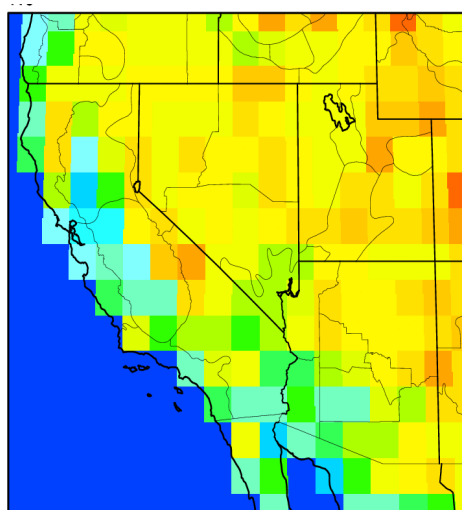




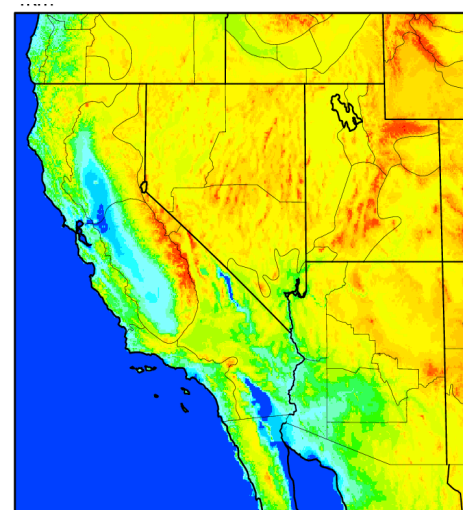
Climate model resolution is improving



IPCC (2007)



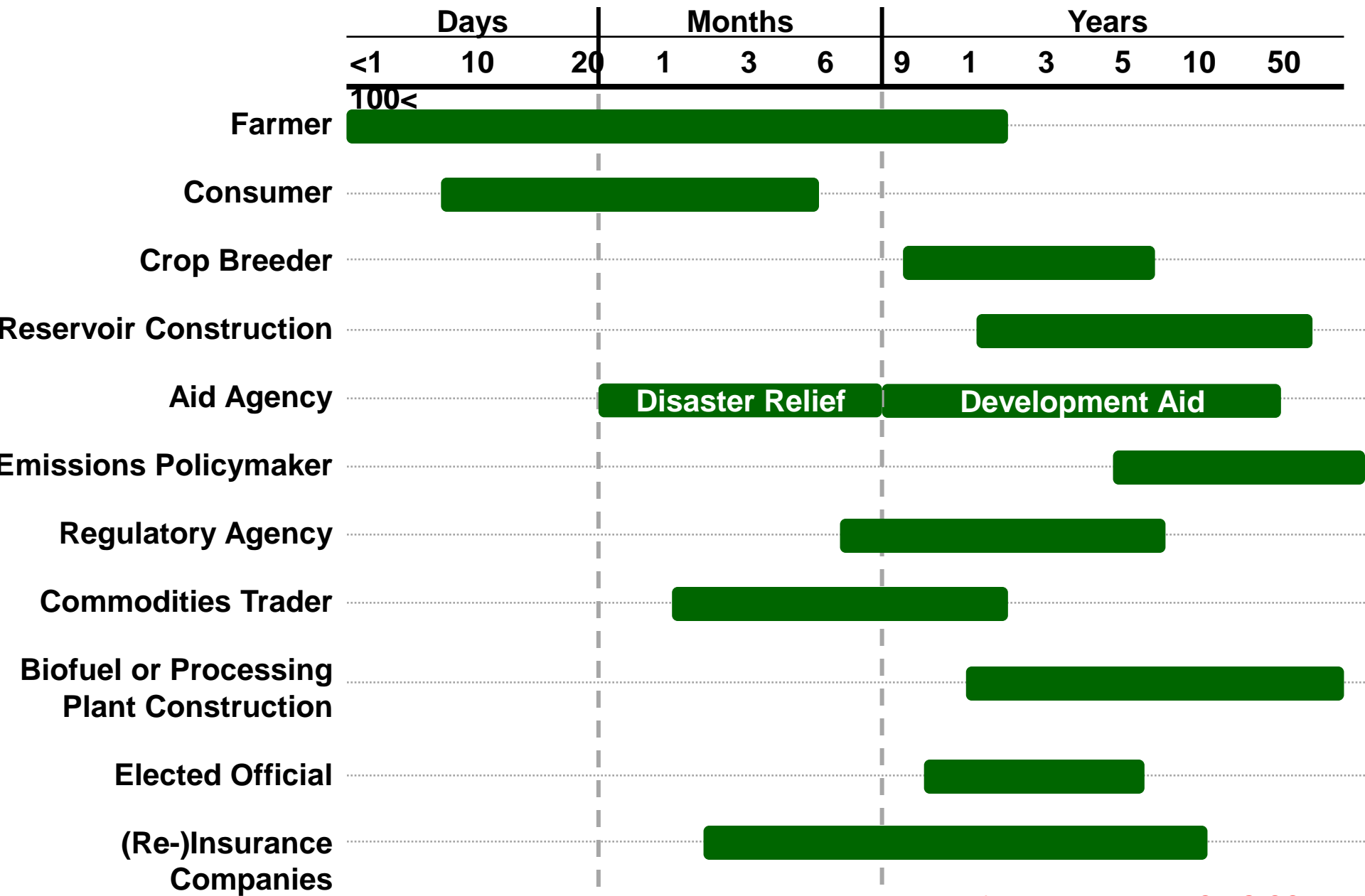
IPCC (2013)



Nested Regional
Climate Model
(NRCM)

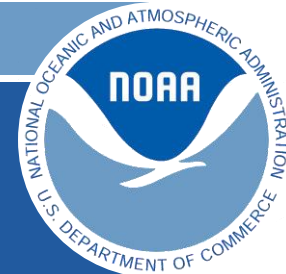
(Hurrell 2008)

Temporal Scale of Agricultural Sector Stakeholder Interest



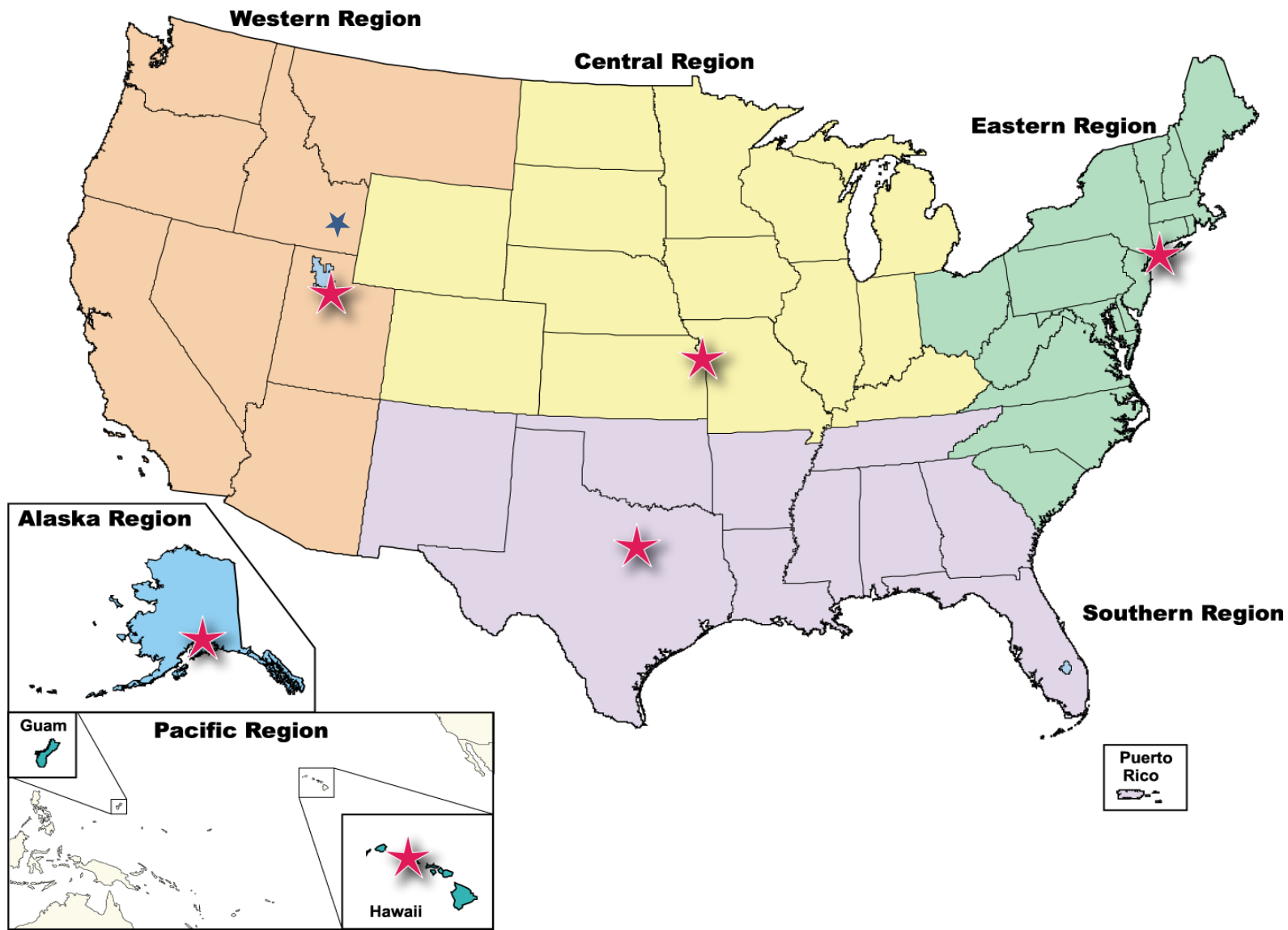


NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



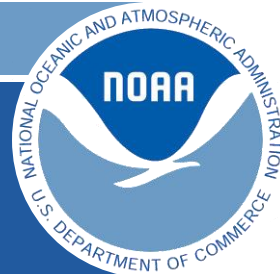
NOAA Structure

Regional Climate Services Directors

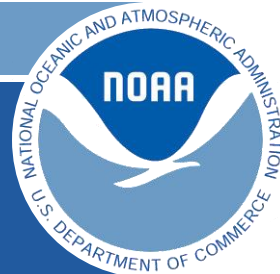




NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

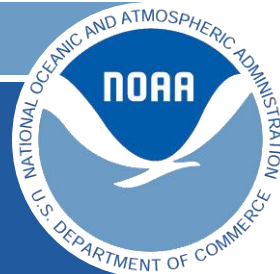


Western Region Climate Services Initial Steps



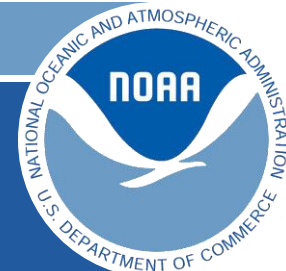
Western Region – Initial Climate Services Priorities

- Form a **regional steering group** comprised of a diverse set of partners to ensure an open and sustained dialogue regarding regional needs
- Conduct a **needs assessment** to identify key regional climate-related vulnerabilities
- Produce an **action plan** that prioritizes the region's climate data and information needs
- Support the development of the next (2013) **National Assessment** report



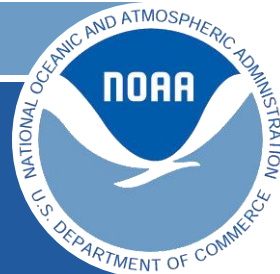
Next Steps

- Develop business practices that strengthen science while meeting demand for services
- Engage external and internal audiences regarding NOAA's climate services plans
- Continued evolution of the NOAA Climate Portal (www.climate.gov)
- Submission of reprogramming package to Congress



Western Region Example Accomplishments

- **Memorandum of Understanding between NOAA and the Western Governors' Association for climate services signed in June 2011**
- **Placed a PACE Fellow (Postdocs Applying Climate Expertise) at the Gulf of the Farallones Ocean Climate Center to determine key indicator variables for determining impacts of climate variability and change in near-shore marine environments**
- **Initiated a comprehensive climate systems, data, and products inventory and gap analysis focused on the 5 National Marine Sanctuaries on the west coast**
- **Continued evolution of the NOAA Climate Portal (www.climate.gov) with emphasis on a western region webpage**
- **Working with the ad-hoc federal sector Climate Change Consortium (C3) and NIDIS to construct a climate services transboundary pilot in the Columbia River Basin**
- **Engaged with the Climate Assessment of the Southwest and the Western Water Assessment RISAs on the southwest regional portion of the National Climate Assessment (Lead Contributing author for the Urban Chapter)**



For more information...

- www.climate.gov
 - NOAA climate portal
- www.noaa.gov/climate
 - Q&As, handouts, presentations
- www.ppi.noaa.gov/ngsp
 - NOAA's Next Generation Strategic Plan
- climateservice@noaa.gov
 - For your general Climate Services questions
- DeWayne.Cecil@noaa.gov – for your WR questions

